

### **Abstract**

A signal processing circuit for satellite communications signal includes a first one dimensional digital beam forming circuit for forming  
5 a beam signal in a first direction and a second one dimensional digital beam forming circuit for forming a beam in a second direction. A direction filtering circuit is coupled between the first one dimensional digital beam forming circuit and the second one  
10 dimensional digital beam forming circuit. The filtering circuit determining a communications signal direction of the satellite communications signal and tunes the filter to reduce a filter bandwidth and a frequency range of said beam signal prior to  
15 processing through the second one dimensional digital beam forming circuit.